DOCUMENT RESUME

ED 196 337 HE 013 326

AUTHOR Prahl, Ellen
TITLE Confidence and Competence: Basic Skills Programs and Refresher Courses for Re-entry Women. Field Evaluation Draft.
INSTITUTION Association of American Colleges, Washington, D.C. Project on the Status and Education of Women.
SPONS AGENCY Department of Education, Washington, D.C.
PUB DATE Oct 80
GRANT G0079-01070
NOTE 15p.: For related documents, see HE 013 324-327.
AVAILABLE FROM Women's Re-entry Project, Project on the Status and Education of Women, Association of American Colleges, 1818 R Street, NW, Washington, DC 20009.

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Adult Students; College Students; Engineering; Federal Legislation; *Females; Graduate Students; Higher Education; Library Skills; Mathematics; *Minimum Competencies; Nontraditional Students; Reading Ability; *Reentry Students; *Refresher Courses; Sciences; Skill Development; Speech Skills; Student Development; *Student Needs; Study Skills; Test Wiseness; *Womens Education; Writing Skills

ABSTRACT

Ways in which institutions can attract and aid re-entry women students by offering courses, workshops and support personnel to help them refresh, upgrade, and update basic academic skills are suggested. A wide range of possible actions is included so that institutions can pursue those most appropriate to their individual circumstances. Reasons why basic skills programs and refresher courses can help re-entry women and types of courses they need are listed. Suggestions on what an institution can do are provided for each of the following areas: how to study; how to improve reading ability; how to take examinations; how to write college papers; how to brush up in math and science; how to communicate and give presentations in class; how to manage time and juggle schedules; and/or how to use new information resources in the library, language lab, and classroom. Refresher courses for graduates with degrees in science and engineering and for re-entry women in technical fields and coordination of basic skills and refresher courses with re-entry and regular academic programs are other institutional efforts. Approaches to meeting the needs of re-entry women from special population groups, such as single parents, displaced homemakers, older women, minority women and handicapped women, are considered. Information on the Age Discrimination Act of 1975 and an annotated bibliography are included along with a field evaluation questionnaire for the draft of this paper. (SW)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED196337

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

Field Evaluation Draft

project on the status and education of women

Confidence And Competence: Basic Skills Programs and Refresher Courses For Re-entry Women*

TABLE OF CONTENTS

	Page
Introduction	1
Re-Entry Women: Why Some Need Basic Skills and Refresher Courses	1
What Basic Skills and Refresher Courses Do Re-Entry Women Need?	2
Improving Study Skills	2
Improving Reading Skills	4
Improving Examination Skills	4
Improving Writing Skills	4
Improving Math and Science Skills	5
Refresher Courses for Graduates with Degrees in Science and Engineering and for Re-Entry Women in Technical Fields	6
Improving Class Communications Skills	7
Improving Time Management Skills	7
Using New Resources in the Library and Classroom	8
Coordinating Basic Skills and Refresher Courses with Re-Entry and Regular Academic Programs	9
Providing Basic Skills and Refresher Courses for Re-Entry Women: General Recommendations	10
Legal Considerations	10
Conclusion	11
Selected List of Resources	12

WANTED: Your Opinion

As part of its WEEA project on the educational needs of re-entry women and other nontraditional postsecondary students, the Project on the Status and Education of Women seeks your reactions and comments on each one of the papers developed. Please help us by filling out the brief questionnaire at the back of this paper and return it by December 15, 1980 in the pre-paid envelope we have provided. We look forward to receiving your suggestions.

INTRODUCTION

Even the most conservative projections for the 1980's forecast large increases in the labor force participation of women, especially those between the ages of 20 and 54. The Bureau of Labor Statistics expects the participation of women aged 20 to 24 to increase nearly 75 percent; for women aged 25 to 54 the expected increase is nearly 70 percent. Many of these women will require further education in order to play important and permanent roles in the labor force. Currently, four out of five American women who work outside the home today hold low-paying, low-status jobs. They work in service industries, clerical occupations, retail stores and factories. Education and training offer them the greatest possibility for entry into other positions.[1] Although women return to school for a variety of reasons, most return to school to pursue careers that will enable them to support themselves or their families.

For the first time since World War II, women outnumber men at colleges and universities, and accounted for 50.7 percent of the 11.7 million students enrolled in the United States in 1979.[2] This is due in part to the greater numbers of adult women enrolled at all levels of higher education. Among students under age 35, the male and female student population is equal—about 5 million each. But among students over 35, there are almost twice as many women as men—914,000 compared with 487,000. In the fall of 1979, 33.6 percent of the men and 37.8 percent of the women enrolled in college were 25 or older.[3]

Re-entry women often encounter obstacles as they make the transitions involved in returning to school.[4] In some instances, institutional policies and practices may present barriers to returning women; in others, family and/or job responsibilities may be major factors in making re-entry difficult. Beyond this, however, a significant number of re-entry women—particularly those who have been out of school for some time—lack confidence in their own basic skills and abilities.

This paper suggests ways in which institutions can attract and aid re-entry women students by offering courses, workshops and support personnel to help them refresh, upgrade and update basic academic skills. Some institutions offer such programs for credit,

* This paper was written by Ellen Prahl and edited by Roberta M. Hall. Staff from the Women's Re-entry Project and the Project on the Status and Education of Women also contributed to the research and development of this paper.

FIELD EVALUATION DRAFT: This paper was developed under Grant #G0079-01070 from the Women's Educational Equity Act Program of the Department of Education. Opinions expressed here do not necessarily reflect the position or the policy of the Department of Education, or the Association of American Colleges, and no official endorsement should be inferred. For further information, contact the Women's Re-entry Project, Project on the Status and Education of Women, Association of American Colleges, 1818 R St., NW, Washington, DC 20009 (202) 387-1300.

HE013 326

300

others on a non-credit basis. Whether or not a particular suggestion is appropriate will depend on the characteristics of the institution and those of its re-entry students. A wide range of possible actions is included so that institutions can pursue those most appropriate to their individual circumstances.

Institutions are likely to find many of the ideas and suggestions in this paper helpful with respect to other nontraditional students as well. Additionally, since many institutions already offer basic skills programs or refresher courses, they may find that these can be adapted easily to serve re-entry women. By informing re-entry women about existing basic skills services, and by expanding or redesigning such services where necessary, institutions can help re-entry women work confidently toward completion of their degrees.

RE-ENTRY WOMEN: WHY SOME NEED BASIC SKILLS AND REFRESHER COURSES

"I returned to college with a minus and a plus—rusty skills and a desire to succeed."

College work demands that students be adept at such skills as knowing how to study efficiently, taking lecture and reading notes, and writing exams and papers. In addition, students must be able to read critically, analyze information, answer questions, assert themselves and make decisions. These capacities are crucial to learning.[5]

Many women who have thought about returning to the campus to upgrade their education do not do so, often because they fear they lack the necessary skills to compete with younger students or are simply not at a skill level which will enable them to return to school successfully. Others, who have recently returned to college, may initially feel their skills in studying, reading, writing, math, science, exam-taking and classroom communication are inadequate. Of the fifty-one re-entry women interviewed in a recent study at Northwestern University (IL), more than half reported they felt anxious about academic concerns. Most feared they would no longer remember how to take an exam successfully, write a term paper, or command the math and verbal skills they had had when they were younger.[6] Such lack of confidence in basic skills may needlessly deter some women from returning to college, and may make it difficult for those who have returned to work at their full potential and/or to remain in degree programs.

While many colleges and universities offer basic skills programs and refresher courses, they are usually designed for 18-22 year-old students, and sometimes limited in enrollment to students who test below a given achievement level. Expanding, redesigning and publicizing these programs with re-entry women in mind can provide substantial benefits for re-entry women and for institutions.

Basic skills programs and refresher courses can help re-entry women:

- improve classroom skills and academic achievement;
- increase self-confidence and motivation; and
- raise self-esteem and level of aspiration.

Such programs can be helpful to institutions in a variety of ways. They may:

- attract new re-entry women when publicized in recruiting and outreach programs;[7]
- serve as a way for potential re-entry women to test out whether they can or want to resume schooling;
- keep attrition rates down by helping re-entry women make the transition to college-level work;
- increase academic achievement; and
- encourage re-entry women to realize their academic potential—not only for undergraduate, but also for graduate work.

WHAT BASIC SKILLS AND REFRESHER COURSES DO RE-ENTRY WOMEN NEED?

Not all re-entry women will need help with basic skills or with updating their knowledge of math, science, and information resources. For those who do, however, the opportunity to refresh and rebuild old skills and to develop new ones may make the difference between failure and success.

Many re-entry women may need help in learning or relearning:

- how to study;
- how to improve reading ability;
- how to take examinations;
- how to write college papers;
- how to brush up in math and science;
- how to communicate and give presentations in class;
- how to manage time and juggle schedules; and/or
- how to use new information resources in the library, language lab and classroom.

IMPROVING STUDY SKILLS

Helping re-entry women improve their study skills may include setting up a study skills or learning assistance center to offer workshops, study skills courses and tutorial assistance. However, there are any number of actions institutions can take to provide special skills assistance to re-entry women and/or to make them aware of existing programs.

What the Institution Can Do

- **Offer an orientation workshop to provide prospective and enrolled students with information about existing programs for basic skills and refresher courses.** The Women's Center for Continuing Education at Northern Michigan University holds a one-day workshop in July for persons who have been out of school and are considering taking courses. Speakers from student support services provide information on their programs for basic skills for women who ask: "Will I remember how to study?"

The University of Maryland's program, "Second Wind,"[8] works with re-entry women both before and after they start classes. An opening orientation workshop makes them aware of what is available in academic support services. Continuing workshops provide help in setting goals, studying, taking exams, managing time, and juggling multiple roles.

- **Offer summer seminars and mini-refresher courses designed to improve basic skills.** At Salem College (NC) the first step in the Salem Studies Program—a fully accredited Bachelor of Arts program for women whose college careers have been interrupted or who wish to begin a college program—is a free two-week summer seminar. This seminar helps students determine their educational goals, assess their capacity to study, and sharpen their skills in reading, writing and research.
- **Provide a study-skills center on campus staffed with counselors who are especially trained in the needs of re-entry women, and/or use re-entry women as peer tutors.** Study skills centers may deal with such problems as how to take lecture notes, how to read a textbook, how to increase concentration and listening skills, how to plan a study schedule, how to prepare for an exam and how to write academic papers.[9] Instructors are usually available to work with students individually or in groups. In some institutions, credit-bearing study skills classes are available to guide students in reviewing study skills and improving those in which they feel deficient. Many students who are not having particular difficulties routinely take part in study skills programs, and re-entry women who have average or even above average skills can often increase them considerably by enrolling. Whether or not they offer regular classes, study skills centers can provide a variety of resources for re-entry women and other students. These include:
  - audio-visual tapes and cassettes on taking class notes, preparing for and taking examinations, writing papers, using the library, language labs and other facilities; and
  - books on various techniques for studying writing, taking examinations, etc.[10]

  At De Anza College (CA) the skills center is an arm of the tutorial division of the educational diagnostic clinic. The center offers diagnostic tests in every academic area to determine areas in which students may need additional assistance or brush up work, as well as twenty different courses in basic skills. Students can pre-register for skills tests and/or for use of the center before classes begin, and can register up to the ninth week of class. Approximately 2,200 students use the center annually.
- **Incorporate assessment of skills into special re-entry courses.** "Re-entry to Education" is a 3-unit course offered by the University of Michigan at Dearborn in the liberal studies department which helps adults explore their interests and consider how further education can benefit career and personal goals. It includes self-evaluation tests to help students discover their present academic abilities. Additionally, it gives students a chance to experiment with many of the activities associated with college-level study: writing a short paper, reading, using the library, taking tests and participating in group discussions. The course consists of three class meetings and two individual sessions with instructors, and is given on a pass/fail basis.
- **Develop special study skills programs for re-entry women.** The Reading and Study Skills Program (RSSP) at the University of Kansas provides resources and programs for developing and sharpening skills. These include material offering tips and techniques for more effective study, guides for studying language and scheduling time, a taped speedreading course, and how-to books for writing themes. Staff is available to discuss individual study needs.

  The Center for Continuing Education of Women at the University of Michigan offers numerous programs at regular intervals to help refresh student skills in reading and study efficiency, mathematical and written communication skills.

  At Columbia University's School of General Studies (NY), an undergraduate liberal arts college for adults who are 21 years or older, WOMANSPACE--"A Career Options Program for Women"—offers educational, career, and personal counseling. Among the services offered is study skills development for women who experience anxiety about returning to the classroom. Through one-to-one tutoring, self-paced computer-assisted instruction, workshops, and mini-courses, women can review basic skills in English, mathematics, library use, and study and research techniques.
- **Combine counseling and study-skill development as part of a re-entry course.** "How to Succeed in College" at the University of Maryland is a one-credit regular academic course for women returning to school, developed to meet the academic, vocational and personal needs of re-entry women who come to the reading and study skills lab for counseling and advising. The course aims at increasing academic success by providing study skills aids and academic support services.[11] Students are required to do three projects: 1) an academic skills project, 2) a career exploration project, and 3) a campus, community or women's resources project. The course includes sessions on using the reading and study skills lab, taking notes and preparing for and taking exams. (Students have the experience of being in a "real" college course; they receive a grade and one college credit.)
- **Offer study skills help through general continuing**

education programs. The Continuing Education Center at Clarke College (IA) offers several basic study skills workshops. The sessions help participants move confidently into college level work after mastering basic skills such as building vocabulary, budgeting time, improving concentration, taking notes, studying for tests and using the library.

- **Offer self-paced individualized learning courses to help re-entry women brush up their skills by using "take home" audio cassettes, study guides and reading assignments.** REACH (Renewed Expectations for Adults in Continuing Higher Education) at the University of Michigan at Dearborn offers several individualized learning courses. Designed to offer working adults and other busy persons the opportunity to take full-credit university courses without attending regularly scheduled classes, the program combines "take home" audio cassettes, study guides and reading assignments. The student decides when to come to the university for tests.

IMPROVING READING SKILLS

"I spent so much time gathering information—reading and research—that there was little time left to write my papers."

Re-entry women are often very highly motivated to learn and spend a great deal of time reading and using library resources. Although many women may re-enter college with average or higher reading speeds, they may lack the special reading skills needed to extract quickly the major points from a textbook or journal article. Also, because re-entry women often juggle multiple roles, some may initially find it difficult to concentrate on lengthy reading assignments.

What the Institution Can Do

- **Offer reading clinics or labs for those re-entry women who wish to increase their ability to read for college.** These clinics often emphasize the different skills required for reading different kinds of material: research reports, essays, literature, and popular material. Reading clinics help students who wish to increase their reading speed as well as to improve their comprehension level.[12]
- **Develop reading skills workshops and/or courses for effective textbook comprehension.** The University of Michigan Center for Women offers a three-week course called "Reading Improvement" to increase comprehension and concentration; the University of Maryland offers two half-hour workshops sessions for re-entry women as part of a reading skills program.

IMPROVING EXAMINATION SKILLS

"I thought I wouldn't do well on tests or exams, but when they were over, I found to my delight and frustration that I was overprepared. I'd spent too much time studying, and had let other assignments slide . . . I disliked preparing for exams so much that I avoided classes where they were the only determinant of a grade."

Of all the activities associated with returning to school, taking exams often causes the adult student the most anxiety.[13] The returning woman has a strong desire to succeed and the examination is the instrument that will determine her success: it is a tangible measurement of how well she is doing. Some women even avoid taking certain courses—especially in math and science—as much because of their fear of tests as concern about whether their math and science background is adequate. Improving exam-taking skills can build confidence, relieve test anxiety and increase options in nontraditional majors for women.

Admissions testing is another area of concern for many re-entry women. Most institutions require the Scholastic Aptitude Test or the Graduate Record Examination. Women who are otherwise prepared but whose test-taking skills are rusty may have difficulties in scoring high enough to qualify for admission.

What the Institution Can Do

- **Offer special skills courses in taking entrance exams to help eliminate fear of testing.**
- **Develop workshops in test anxiety, exam skills, and memory training.** Many institutions offer workshops through a study skills center and/or as part of an overall program of refresher work for re-entry women.
- **Encourage re-entry women to take College Level Examination Programs (CLEP) tests.** Re-entry women can take CLEP tests either before or after they enroll in an institution. Designed to measure achievement levels in a variety of subject areas, CLEP offers re-entry women a no-risk test-taking experience as well as an opportunity to demonstrate subject area proficiency that may be accepted in lieu of coursework. (It is possible to receive a year or more of college credit through the CLEP tests,[14] which are administered nationally by the College Entrance Examination Board, Princeton, NJ.)

IMPROVING WRITING SKILLS

"I sought help from a drop-in writing counselor. Without his one-to-one guidance, I would have dropped out of school."

Organizing thoughts on paper can be the single most important skill required of students—not only while they are in college, but also when they enter the world of work. In recent years many institutions have developed programs to improve students' writing skills. Like other college students, re-entry women may be handicapped by inadequate preparation at the primary and secondary levels. Moreover, they may be additionally

disadvantaged if they have done little writing during the years interrupting their formal education.

Re-entry women sometimes need refresher courses to learn to put their ideas on paper in the organized style required for class reports, themes, essays, research papers, theses and/or dissertations. Some re-entry women who lack confidence in writing skills are particularly hesitant to seek help from their professors or their younger classmates because they feel that, as mature students, their skills are expected to be more highly developed. However, lack of confidence and competence in academic writing skills can affect success in all classes requiring essay exams and research papers. Basic writing skills programs not only enable re-entry women to realize they have something to say and the ability to say it clearly, but help them feel capable of achievement in a variety of academic subjects.[15]

What the Institution Can Do

- **Offer re-entry women multi-week orientation programs that emphasize writing skills. Hold them at various times throughout the year.** Such programs can provide students with writing experience while developing self-confidence in a classroom situation.[16]
- **Teach basic writing skills in courses likely to be of particular interest to re-entry women.** At one institution, a course was jointly taught by faculty of the English and history departments. The emphasis was on writing as well as on the subject matter—20th Century American women in history.[17]
- **Provide and publicize writing labs that help re-entry women.** Although writing labs are open to all students, some re-entry women may think of them for younger students only, and may also be unaware that such labs offer new techniques to help solve writing problems.
- **Offer writing laboratories designed to solve problems with the basics of acceptable writing: sentence structure, grammar and punctuation.** Some re-entry women need to start by relearning these fundamentals, but often find their institution does not offer this sort of assistance.
- **Offer refresher courses in writing college level papers** with emphasis on how to analyze, define, compare and contrast, build an argument and narrow a topic.
- **Change the catalogue titles of basic English composition courses to make it clear they are not only for freshmen,** e.g., Introductory Composition rather than Freshman Composition.
- **Offer writing help in a drop-in setting** publicized to attract re-entry women. Alternatively, offer peer or professional help at designated times in the women's center and/or continuing education office.

IMPROVING MATH AND SCIENCE SKILLS

"Although I was advised to take math, computer science, and economics as electives, I had a case of 'mathophobia' in high school and college. Now I find that I need basic skills in algebra to be admitted to advanced degree work in almost any field. Even if I wanted a graduate degree in literature, I would have to take the Graduate Record Examination which requires basic math skills. The same is true for the LSAT [Legal Scholastic Aptitude Test] and the GMAT [Graduate Management Admissions Test]. How can I go into either the 'traditional' or the 'nontraditional' fields for women if I suffer from math anxiety?"

Review classes in math and science can be especially important for re-entry women. Over one-third of the re-entry women questioned in a 1976 survey reported that inadequate preparation in these areas caused them academic difficulties.[18] A working knowledge of math and science is not only a prerequisite for enrolling in many required and elective courses, but may also be a requirement for admission to both undergraduate and graduate programs.

Lack of skills in math and science can affect re-entry women in a number of ways. It may preclude some re-entry women from being considered for admission to schools that emphasize Standard Aptitude Test (SAT) or Graduate Record Exam (GRE) scores in their selecting process. Other re-entry women who majored in a liberal arts area when they were originally enrolled in college may wish to change majors to a math, science, or social science area only to find that entry level courses in these fields require a modern high school math or science background which they lack. Finally, re-entry women who previously majored in the sciences may find that the theories they learned are out of date, and the skills they had are rusty from disuse.

Some re-entry students find that even beginning mathematics courses presume a level of knoweldge beyond their abilities, despite the fact that they may have taken mathematics courses in the past. They need a refresher course that will sharpen their skills and permit entry into the regular program. Such an opportunity to "ease back" into subjects where knowledge builds on increments based on previous course work might help to overcome the tracking of re-entry women into sex-stratified occupations and professions.[19]

Math anxiety has generally been a problem for women in our society, and may be particularly so for women in the re-entry age group. Research suggests that the educational climate from grade school on discouraged women from taking courses in mathematics, and operated on the assumption that math was for men—women would never do well with numbers.[20] However, contemporary studies indicate that learning strategies can be devised to counter female underachievement.[21] In the meantime, there is much the institution can do to help re-entry women refresh and build upon their math skills.

What the Institution Can Do

- **Offer math brush-up skills to re-entry women prior to enrollment.** In addition to increasing their preparation for required courses, this may also increase their options for a nontraditional major because they will have the necessary skills to go forward.
- **Develop nonthreatening, understandable courses that help returning students eliminate their fear of math as well as develop their mathematical skills.** Georgetown University (DC) offers its re-entry women a course called "Math Without Fear."
- **Develop math skills programs that assess students' skills and then develop individualized learning programs on the basis of their test performance.**
- **Offer courses or workshops on such topics as preparing for aptitude tests and conquering math and science anxiety.**
- **Offer self-paced programs for math and science anxiety that allow students to progress at their own individual pace through the use of cassettes, tapes and study guides.** The programs can be offered through a study skills center, re-entry women's program, or the relevant departments.
- **Offer a math anxiety workshop.** Long Island University (NY) developed a program which identifies those mathematical abilities important for women seeking employment in professional, technical and managerial occupations. The 10-day, noncredit summer workshop helps women gain mathematical skills and overcome their "mathophobia." Basic mathematical concepts and math language are taught in a nonthreatening atmosphere to help build participants' confidence in mathematical ability.
- **Encourage re-entry women who are skilled in math to act as counselors for other re-entry women.** The University of Wisconsin Women's Center provides peer counselors in addition to the professional counselors available through the university, while the Center for Continuing Education of Women at the University of Michigan publishes a directory of staff resource persons including a group called Women Math Tutors. The women listed offer combined classroom and on-the-job knowledge of math to re-entry women seeking help with math skills.
- **Sponsor a workshop for staff of the math and science departments to make them aware that re-entry women may be likely to suffer math anxiety.**
- **Develop unbiased materials for math and science workshops and courses.** Lane Community College (OR) used math problems such as "The number of married women in the workforce today is 5 times the number of married women in the workforce in 1940. There are 23 million in the workforce today. How many millions were there in 1940?"
- **Design a special summer program focusing on communications and math skills to make re-entry or entry into college smoother.** The University of Michigan at Dearborn offers "Re-entry to Education," a program that concentrates on math for "mathophobes" (persons with an unreasonable fear of numbers). The math section is patterned after "math anxiety" workshops offered by some chapters of the National Organization for Women.

REFRESHER COURSES FOR GRADUATES WITH DEGREES IN SCIENCE AND ENGINEERING AND FOR RE-ENTRY WOMEN IN TECHNICAL FIELDS

Women with previously earned degrees who are seeking to return to work often need retraining and/or refresher courses. The Scientific Manpower Commission reports that approximately 900,000 women were awarded baccalaureate degrees in the physical, life, mathematical and social science fields from 1960-61 through 1975-76. Of that figure, it is estimated that 315,000 women currently not employed are eligible for career training or retraining projects.[22]

What the Institution Can Do

- **Develop refresher or retraining programs especially for re-entry women with undergraduate degrees in science and engineering.** American University (DC) offers a Women in Science Program which is funded by the National Science Foundation. This program retrains re-entry women graduate students who wish to upgrade their credentials.
- **Set up an office for women considering enrolling or already enrolled in engineering programs.** The University of Michigan's Office for Women in Engineering is a resource and counseling center for women entering this nontraditional field. Listed in its Adult Student, Faculty and Staff Resource Locator for re-entry women, the office coordinates its activities with the campus chapter of the Society for Women Engineers.
- **Devise a needs assessment for women interested in engineering, computer science and related technical fields.** Union College (NY) has done "An Assessment of Needs of Women Returning to College for Training in Engineering and Computer Science," to determine 1) if the number of re-entry women with mathematical ability and an interest in computer science warrants the implementation of a special program, and 2) what types of retraining and support services the college might provide.

  The National Science Foundation awarded over one million dollars in 1980 to colleges and universities sponsoring science career workshops and projects for women. The workshops will be held at 17 different schools and are designed to encourage more women to choose careers in scientific and technical fields. Approximately 3,000 graduate and undergraduate women are expected to participate.[23]

IMPROVING CLASS COMMUNICATION SKILLS

"I sat in the back of the classroom and didn't open my mouth for the entire first semester."

Making class presentations or participating in class discussions may be difficult for some re-entry women. In fields where the body of knowledge has changed substantially—such as the sciences and math—re-entry women may fear their information is outdated, and may therefore feel inadequate in class participation. In other fields, re-entry women may needlessly believe their opinions are not as valid as their younger classmates', and at the same time overlook the mature perspectives they themselves can bring to bear on issues. While many re-entry women shrink from class participation, some may "talk too much," ask the same question repeatedly, or inappropriately challenge a younger instructor—in part because they are unfamiliar with correct classroom discussion procedures. In many instances, instructors place a heavy emphasis on class participation when determining grades, and re-entry women may find their verbal behavior in the classroom a barrier to receiving higher grades.

What the Institution Can Do

- **Offer class communication skills courses or workshops.** Alverno College (WI) offers re-entry women a workshop called "Making Your Words Work," designed to help students evaluate their speaking and writing skills. Using videotape and other methods, an instructor guides students in establishing criteria for effective classroom speaking.
- **Include communication skills in assertiveness training workshops.** Lane Community College (OR) offers a Building Skills for Confidence Program through its Women's Awareness Center. Women improve their communication skills in a 3-unit, assertiveness training course that helps them learn to talk with others as equals, express preferences and opinions directly and clearly, negotiate differences, and exchange information effectively. Many other campuses have similar programs, some offered at women's centers.
- **Encourage instructors who consider class participation a major factor in grading to make this clear to their classes.** Re-entry women are sometimes unaware that class participation may count heavily and even make the difference between grades. Many returning students have been left wondering why they received a B in class when they turned in A work on exams and papers.
- **Promote informal discussions between re-entry women and small groups of faculty to help re-entry women overcome their reticence.** Invite faculty members to the women's center, continuing education office, or college "coffee house" to describe courses their department offers, explore campus-wide issues, discuss film festival offerings, etc.

IMPROVING TIME MANAGEMENT SKILLS

"While working in the kitchen I would review for exams by listening to tapes that I had recorded in class."

Going back to school is a change in lifestyle that necessitates changes in scheduling and time management. Some women may need help in getting an overview of and realigning their activities. Many women returning to school eventually devise ingenious ways to juggle multiple responsibilities. Initially, however, they may be unaware that they are experts at time management, and have acquired organizational skills as a result of caring for their families and/or working outside the home in paid or volunteer positions.

What the Institution Can Do

- **Offer time management workshops.** George Washington University's Continuing Education for Women Center (DC) offers a time management workshop that identifies systems for making more effective use of time, both in school and in personal life.
  The University of California at Santa Barbara offers workshops for re-entry women to address questions about juggling multiple roles.
- **Offer basic skills and refresher courses to help re-entry women make confident assessments of their skills, work speeds, and academic responsibilities.** Study skills programs and refresher courses (described on p. 2) help re-entry women budget their time wisely and use it productively.
- **Provide materials which offer suggestions on how to combine family, work and school responsibilities.**
- **Include sessions on time management as part of other skills courses where appropriate.**

USING NEW RESOURCES IN THE LIBRARY AND CLASSROOM

"Limiting my reseach to the familiar card catalogue resulted in limited research. The term 'microfiche' was more foreign than the language I was studying."

Many re-entry women may be unprepared for the widespread application of technology to higher education. A good number of colleges and universities now use computer retrieval systems in their libraries and elsewhere, individualized tape systems in their language labs, and a host of other technologies (such as videotape) in some of their departments. Especially if their formal education ended before the 1960's, re-entry women are likely to find the use of slides, film, audio-visual aids, microfiche and computers very much in contrast to their previous classroom and research experience. For example, they may not know how to do a computer search in the library. Re-entry women—like other students—need to know what new informational

resources are available and how to make best use of them.

What the Institution Can Do

- **Offer a library skills and/or a college technology resources workshop.** Alverno College (WI) offers information on uses of the library media center through PACE, Personal Advancement through Continuing Education, a program for re-entry women.
- **Include information about equipment and workshops on its use in re-entry brochures and admissions materials.**
- **Designate a librarian and a faculty member in each department to answer questions about the use of computers and other resources.** Provide a list of these persons to re-entry women. Ensure that this person is familiar with the skills problems re-entry women might face.
- **Offer a practical, hands-on library workshop on how to research a paper.** Make arrangements with the reference librarian to provide a "tour" of resources. Include a basic text on how to document research.

SPECIAL POPULATIONS[24]

Institutional strategies for providing basic skills and refresher courses can easily be adapted to serve re-entry women from special population groups, such as single parents, displaced homemakers, older women, minority women and handicapped women.

Single Parents, Displaced Homemakers, and Older Women

Single Parents

Many centers for continuing education for women report that over half their students are divorced. Generally, when divorced women return to school they do so to earn the credentials necessary for a job or career and are apt to put forth their best efforts. Indeed, a recent sampling of graduate schools showed that divorced women outperformed other students—despite the fact that 70 percent of the women surveyed also had children.[25]

No other group of returning students feel the pinch of poverty and the need for affordable child care services[26] more than single mothers. Currently, female heads of households account for the largest proportion of economically disadvantaged persons. The need for upgrading education and training for this group of women is acute.

Displaced Homemakers

Displaced homemakers are former homemakers who, through divorce, separation, widowhood, ineligibility for public assistance, or other crisis, have lost their source of economic support. Most originally saw themselves as graduating from high school and becoming wives and mothers; consequently, their academic and vocational goals were often short term and limited. Having spent a substantial number of years in the home caring for family members, displaced homemakers find re-entry difficult, despite the fact that some may have bachelor's degrees, general education degrees, certificates, or business diplomas. For some displaced homemakers life has changed suddenly and drastically. The transition from the role of homemaker to single re-entry student may occur without adequate preparation time for acquiring or brushing up basic skills.

Older Women

For many women, transition to old age brings reduction in income and status as well as the loss of traditional family role. Women outnumber men by 145 to 100 in the 65 plus age group, and while most older men are married, most older women are single or widows.[27] Increasing numbers of older women are returning to higher education, often on a part-time basis for personal enrichment, but sometimes full-time to earn a long-postponed degree. After an interruption of decades, older women may find their lack of basic skills a serious problem.

What the Institution Can Do

- **Offer classes in how to combine the roles of student and single parent.** Humboldt State University (CA), for example, has a two-unit sociology course called "Single Parents at the University."
- **Offer televised courses in reading and study skills, math anxiety, exam skills, etc. for women with small children at home.**
- **Offer a study skills and reading workshop especially for women in transition.** At the University of California at Santa Barbara, the Women's Center Newsletter publishes notices of "Women in Transition Programs and Workshops."
- **Establish counseling centers for displaced homemakers, single parents and older women.** The group counseling program for women at the University of California's Los Angeles Extension offers an overall counseling program for re-entry women.
- **Establish a referral service so women will know of off-campus resources in their community.** Displaced homemakers, for example, can be referred to the local chapter of Displaced Homemakers Network, Inc., for programs that provide counseling, workshops, training and job referrals.[28]
- **Offer an adult life-skills workshop.** The Adult Life Resource Center at The University of Kansas offers a workshop that focuses on the changes and problems associated with various stages of adult development and strategies to deal with them. The workshop is open to students, staff, professionals in the field, and the public.
- **Establish special programs for retired persons.** Case Western Reserve (OH) has established an Institute of Retirement Studies in which the mean age of students is 64. The women and men en-

rolled range from freshmen to postgraduates.

- **Provide basic skills and refresher courses on audio tapes for older students.** The National Council on the Aging's Senior Center Humanities Program is designed to introduce literature, history, philosophy, sociology and anthropology to older persons.

Minority Women and Handicapped Women

Institutions can help minority and handicapped women make the decision to return to campus and can aid them in the transition by developing and publicizing basic skills courses designed to meet their special needs and to help them move into the educational mainstream.

What the Institution Can Do

- **Develop basic skills programs in Spanish or other foreign languages for non-English speaking students.**
- **Develop basic skills programs in which English is taught as a second language.** The women's program at San Jose City College (CA) offers a one-semester college preparation program designed for women whose primary language is not English. The class is also open to women who desire training in basic English before beginning regular college classes, and is given for credit.
- **Provide minority re-entry students with a head-start summer orientation program to help with writing and mathematics and to familiarize them with college course work and examinations.**
- **Publish a list of targeted basic skills programs and distribute it to groups that work with minority and/or handicapped women,** such as minority offices or centers on campus, local minority organizations, social agencies, hospitals, and rehabilitation counselors.
- **Offer special skills and review workshops at campus minority offices.** The University of Minnesota has four learning resources centers designed to serve Native Americans, Blacks, Chicanos and Latinos, and Asians. The centers provide tutoring, summer institutes, and bilingual classes in math, reading and study skills.
- **Establish a program to assist disabled students.** The Educational Diagnostic Clinic at De Anza College (CA) assists students with learning disabilities through testing, counseling and tutoring. Students are tested not only to determine academic achievement levels, but also to determine how they best learn, e.g., visually, aurally etc. Individual programs are designed to help mainstream these students, 3-5 percent of whom are re-entry women, and 25 percent members of minority groups.
- **Inform academic counselors about basic skills and refresher courses for special populations.** Many students in these categories often do not know how to seek help with academic problems, or feel that asking for help is a sign of inadequacy. Informed counselors can recommend special services as a matter of course.
- **Evaluate all general recruiting materials and catalogues to see that they include information about basic skills programs for re-entry women from special population groups.**

COORDINATING BASIC SKILLS AND REFRESHER COURSES WITH RE-ENTRY AND REGULAR ACADEMIC PROGRAMS

In many instances, basic skills and refresher programs may best help re-entry women and institutions when they are coordinated with re-entry and regular academic programs. Coordination with re-entry programs makes it likely that women most in need of basic skills help will know it is available; coordination with regular academic programs paves the way for such students to move into the academic mainstream.

What the Institution Can Do

- **Have basic skills staff participate in orientation programs for re-entry women.** Staff of the study skills center at De Anza College (CA) attend the orientation meeting for re-entry women sponsored by RENEW, the college's re-entry women's program.
- **Establish a liaison person in each academic department to help with re-entry women's basic skills problems by offering direct assistance or referral to the appropriate program.**
- **Inform academic counselors about all basic skills offerings and about re-entry women's needs in skills areas.** Be certain counselors are aware of re-entry women's concerns. Counselors may want to:
  - **Encourage re-entry students to take a smaller first quarter load.** At the University of California at Berkeley, this option is known as a reduced study list. A smaller first quarter load can allow greater concentration in each class and build confidence in skills.
  - **Conduct "intake" interviews for re-entry women to assess their skills.**
  - **Post notices on campus about academic skills counseling.**
- **Have a written policy concerning the institution's philosophy about learning assistance and distribute it to re-entry women as well as all other students.** This can be incorporated into recruiting and admissions materials and/or descriptions of special programs. Colleges that make such statements available tend to have higher student completion rates.
- **Include basic skills classes in re-entry programs.** The Re-entry Program for Women at Seattle Central Community College (WA) offers both a one-credit college orientation course to make re-entry women aware of available programs and services

and a three-credit course entitled "College Survival Skills" to introduce re-entry women to procedures of educational systems, study techniques, and communication skills. Part of a one-quarter program providing eight credit hours, these classes are scheduled back-to-back between 10:00 a.m. and 1:00 p.m. for students whose time on campus is limited.

PROVIDING BASIC SKILLS COURSES FOR RE-ENTRY WOMEN: GENERAL RECOMMENDATIONS

- **Develop a wide range of credit and noncredit basic skill workshops and courses for re-entry women and schedule them at different times during the day and evening and on weekends.** Alverno College (WI) found that roughly 80 percent of its weekend college students were working women.
- **Offer basic skills courses and workshops in the community as well as on campus.** Use branch campuses, churches and synagogues, civic centers, and other off-campus locations throughout the city and the suburbs so that programs are more accessible for women who have family and/or job responsibilities.
- **Organize a division or department of basic skills.**
- **Provide tutorial assistance for brushing up skills with instructors who are aware of re-entry women's concerns and/or with re-entry women trained in tutoring.** Peer tutors who can share their re-entry experience can often serve as role models.
- **Open up remedial courses to re-entry students, whether or not they demonstrate a need for them on diagnostic tests, if they would like to use them to build confidence.** (At some institutions, students can only enroll for these courses if tests indicate a specific academic need.)
- **Send letters with information on basic skills help to all incoming students.**
- **Include information about basic skills programs in recruiting activities and materials, especially in outreach efforts to older, minority and other special groups.**
- **Include information about basic skills programs in response to inquiries about admission.**
- **Publicize basic skills programs in campus and community newspapers so that re-entry women will know which programs are available.**

LEGAL CONSIDERATIONS

Title IX of the Education Amendments of 1972[29]

Title IX of the Education Amendments of 1972 generally prohibits sex discrimination in federally assisted education programs. More specifically, Title IX covers almost all areas of student treatment and activities, and prohibits services, rules or policies based on the sex of students.

- Institutions are *not* required to provide special services, workshops or courses.[30] However, whatever services an institution provides must be offered to all students regardless of sex.
- Services such as re-entry programs which may be used by a greater proportion of students of one sex than the other, do *not* violate Title IX as long as all students have the opportunity to use these services if they so desire. Thus, these services do not violate Title IX even if women use them in larger numbers than men.
- Programs aimed at re-entry students must be open to both sexes. (Many services originally developed for returning women have long been open to men as well.) Programs aimed at special groups, such as older women, do not violate Title IX provided that men who wish to participate are not excluded. A description of such a program might read: "This program is primarily aimed at women who have been out of the work force and are returning to school. However, men who believe they could benefit from this service and wish to participate may do so."
- Affirmative action is *not* required but may be undertaken by an institution to overcome the effects of conditions which resulted in limited participation by persons of a particular sex. The Office for Civil Rights at the Department of Education may require remedial action if discrimination is found.

The Age Discrimination Act of 1975[31]

Age discrimination affects all people, but older women receive a "double dose" of discrimination —once because of their age and once again because of their sex. If the older woman is a member of a minority group or handicapped, the problem is intensified. In education, age discrimination is not limited solely to senior citizens; it can begin as early as the mid-twenties, when a student may be labeled "too old" for a particular program or activity. The Age Discrimination Act of 1975 (effective January 1, 1979) prohibits "discrimination on the basis of age in programs or activities receiving federal financial assistance." The Act, which contains some exemptions, is unique in that it does not define "age" to limit coverage to a particular group, such as those 65 or older.[32] It simply prohibits discrimination on the basis of age *at any age*. Thus, workshops, courses and programs cannot be restricted to students on the basis of age.

Affirmative action by institutions to overcome the effects of past limited participation by certain age groups is permitted. Special programs or benefits for older students may be permitted if these benefits do not result in excluding otherwise eligible younger students.

What the Institution Can Do

- **Inform all personnel handling skills workshops, refresher courses and learning resources about**

the requirements of federal laws. Conduct workshops and/or disseminate materials explaining the implications of these laws.

- **Develop a procedure to inform *new* staff of the legal requirements and prohibitions.**
- **Include a nondiscrimination clause concerning sex and age in materials describing specific workshops, courses and resources in recruiting materials.**
- **Inform prospective re-entry women about grievance procedures for sex discrimination complaints.** (Grievance procedures are required under Title IX.)
- **Expand grievance procedures to cover age as well as sex discrimination.**
- **Evaluate basic skills programs, study guides and tests for fairness concerning sex and age.**
- **Develop new materials and learning resource programs where necessary.**
- **Examine special programs for women and insure that men are allowed to participate if they wish to.**
- **Abolish age as a requirement for eligibility to enroll in continuing education basic skills programs (rather than as a regular student).** Develop other criteria based on student needs.

CONCLUSION

Basic skills programs and refresher courses can be essential aids in helping re-entry women pursue their college careers with confidence and competence. They may be of particular importance to those re-entry women who have been out of school for a considerable period, who are unfamiliar with new information resources on campus, or who need refresher help in particular subject areas. Such programs and courses aimed at the re-entry population can often be a major incentive in helping women decide to return to school, and a vital factor in enabling them to work at their full potential and/or to remain in degree programs once they have returned to college study.

NOTES

[1]National Advisory Council on Women's Educational Programs. *Working Women Speak: Education, Training, Counseling Needs*, July 1979, Introduction.

[2]National Center for Education Statistics. "Education Directory, Colleges and Universities." Available free from NCES, 400 Maryland Ave., SW, Washington DC 20202.

[3]Bureau of the Census, Education Branch. "School Enrollment—Social and Economic Characteristics of Students," October 1979. Available from the Bureau of the Census, Education Branch, Room 1637, Building 3, Washington, DC 20233.

[4]Further information on deterrents to academic re-entry for women are included in the series of papers on re-entry women by the Project on the Status and Education of Women, Association of American Colleges, in press.

[5]Judith Brandenburg, "The Needs of Women Returning to School," *Personnel and Guidance Journal*, 1974, Vol. 53, No. 1, p. 13.

[6]Esther Benjamin and Judith A. Levy, "Barriers to Educational Opportunities for Re-entry Women in Private Universities," Program on Women, Northwestern University, Evanston, IL, October 1979, p. 34.

[7]See "Recruitment and Admissions: Opening the Door for Re-entry Women," Project on the Status and Education of Women, Association of American Colleges, 1980.

[8]*Second Wind: A Program for Returning Women Students*. A Women's Educational Equity Act project, 1978, 114 p. Available from EDC/WEEAP Distribution Center, 55 Chapel St., Newton MA 02160. $2.75.

[9]A list of studying, writing and exam-taking resources can be found on p. 172 of *So You Want To Go Back To School*, Elinor Lenz and Marjorie Hansen Shaevitz, McGraw-Hill Book Company, NY, 1977.

[10]Jerold Apps, *Study Skills for Those Adults Returning to School*, 1978, McGraw-Hill Book Company, p. 171.

[11]"During the last three semesters, 98 percent of the students felt the course gave them greater self-confidence and better study skills and habits. The average age of the women enrolled in the course was 36 and they had been away from school an average of 13 years.

[12]Apps, p. 172.

[13]Apps, p. 39.

[14]See paper on "Obtaining A Degree: Alternative Options for Re-entry Women," Project on the Status and Education of Women, Association of American Colleges, 1980.

[15]Natalie Foulkes and Beatrice Taines. "Teaching Composition to Re-entry Students," *Community College Frontiers*, Spring 1978, p. 8-12. Describes the Women's Re-entry Program at Diablo Valley College (CA) which uses structured teaching method to alleviate the two principal weaknesses found in English compositions written by re-entry women: vagueness and lack of organization.

[16]Esther Benjamin, "Review Article: Barriers to Academic Re-entry Women and How to Overcome Them," Program on Women, Northwestern University, Evanston, IL, 1979, p. 30.

[17]Ibid, p. 30.

[18]Ibid, p. 29.

[19]Benjamin and Levy, p. 42.

[20]Sheila Tobias, "Math Anxiety: Why is a Smart Girl Like You Counting on Your Fingers?" *MS.*, Vol. 5, No. 1, September 1976, p. 56-59.

[21]Sheila Tobias and Carol Weissbrod, "Anxiety and Mathematics: An Update," *Harvard Educational Review, Women and Education Part II*, Vol. 50, 1980. Available from HER, 13 Apian Way, Cambridge, MA 02138, 128 p., $1.

[22]Sources: Scientific Manpower Commission, *Professional Women and Minorities, A Manpower Data Resource Service, 2nd ed.*, Washington DC, November 1978; National Science Foundation, *Women and Minorities in Science and Engineering*, NSF 77-304, 1977; and National Center for Education Statistics, *Earned Degrees Conferred Series*, Washington DC.

[23]For additional information write National Science Foundation, Room 531, 1800 G St., NW, Washington DC 20550.

[24]See also paper on special populations by the Project on the Status and Education of Women, Association of American Colleges, in press.

[25]Pam Mendelsohn, *Hapoier by Degrees, A College Re-entry Guide for Women*, E.P. Dutton, New York, 1980, p. 71-72.

[26]See paper on "Campus Child Care: A Challenge for the 80's," Project on the Status and Education of Women, Association of American Colleges, 1980.

[27]Ruth Weinstock, *The Graying of the Campus*, Educational Facilities Laboratories, New York, 1978, p. 36-37.

[28]For a listing of Displaced Homemaker Centers, write DHN, 755 8th St., NW, Washington DC 20001.

[29]Education Amendments of 1972 (Section 901-907), 20 U.S.C. Sections 1681-86 (1972). The Title IX regulation can be found at 34 C.F.R. Part 106 and at 40 *Fed. Reg.* 21428-45 (June 4, 1975). For a description of Title IX, see chart "Federal Laws and Regulations Prohibiting Sex Discrimination in Educational Institutions," Project on the Status and Education of Women, Association of American Colleges, 1979.

[30]Although not mandated by Title IX, continuing education

programs, women's studies, women's centers, flexible programs, child care facilities and other supportive programs and policies may be viewed as a sign of commitment to the education of women in the event that a complaint is filed.

[31]Age Discrimination Act of 1975, 42 U.S.C. Sections 6101-6107 (1975). The final government-wide regulation for the Age Discrimination Act can be found at 45 C.F.R. Part 90 and at 44 *Fed. Reg.* 33768-88 (June 12, 1979). The Act also requires each federal agency to issue agency-specific regulations. At the time of this writing (Fall 1980) agencies were in the process of issuing those regulations. For additional information, see "The Age Discrimination Act of 1975 and Women on Campus" Project on the Status and Education of Women, Association of American Colleges, 1978.

[32]Specifically, age distinctions may be used where they are:

- adopted in a federal, state or local statute;
- necessary to the normal operation of the program and can pass the four-part test set out in the regulation; or
- necessary in order to achieve a federal, state or local statutory objective and can pass the four-part test in the regulation.

SELECTED LIST OF RESOURCES

Apps, Jerold W. *Study Skills For Those Adults Returning To School.* 1978, 237p. Available from: McGraw-Hill Book Co., $4.95.

Armstrong, Jane M. *Achievement and Participation of Women in Mathematics: An Overview*, a report from the Educational Commission of the United States, 1980, suggests strategies to reduce the imbalance of women in certain areas of math achievement. These include programs to combat math anxiety, to increase awareness of the math requirements for different careers, and to encourage students to set high, but realistic goals. Order from ECS, 1860 Lincoln St., Suite 700, Denver, CO 80295; free.

Benjamin, Esther and Levy, Judith A. "Barriers to Educational Opportunities for Re-Entry Women in Private Universities," 1979, 44 p.; and Esther Benjamin "Review Article: Barriers to Academic Re-Entry Women and How To Overcome Them," 1978, 51p. Two of seven papers on the challenges and problems faced by re-entry women in a university. For a complete list of subjects and prices write: The Program on Women at Northwestern University, 1902 Sheridan Rd., Evanston, IL 60201.

Eliason, Carol. *Neglected Women: The Educational Needs of Displaced Homemakers, Single Mothers, and Older Women.* Report of the National Advisory Council on Women's Educational Programs. 1978, 64p. Available from ERIC Document Reproduction Service, Box 190, Arlington, VA 22210; #ED 163-138, $0.83 microfiche, $4.82 hard cover, plus postage.

Fennema, Elizabeth, et al. "Women and Mathematics: Research Perspectives for Change". Three papers discussing the biological, psychological, sociological influences on women's participation in studies of higher mathematics, 1979, 213p. ERIC #ED 160-403, $0.83 microfiche, $13.82 hard cover, plus postage.

Foulkes, Natalié and Taines, Beatrice. "Teaching Composition to Re-Entry Students," *Community College Frontiers*, Sp. 1978, p. 8-12. Describes the Women's Re-entry Program at Diablo Valley College (CA) which uses structured teaching methods to alleviate the two principal weaknesses found in English compositions written by re-entry women: vagueness and lack of organization.

Frieze, Irene Hanson. "Women's Assessment of Their Academic Competence," Lecture on the Development of the Person in the Context of Higher Education Lecture Series, California State University. Addresses the problems re-entry women have in developing a positive view of their academic competence. May 1978, 33p. ERIC #ED 163-856, $0.83 microfiche, $2.06 hard cover, plus postage.

Hedges, Larry V. and Majer, Kenneth. *Female and Minority Representation in College Majors as a Function of Mathematics Requirements*, San Diego: University of California. Report No. OASIS-RR-2, January 1976. Significant negative correlations were found between the number of math courses required for majors and the representation of each female group and total group in the major except Asians.

Herrman, Barry, et al. *Serving Lifelong Learners.* San Francisco, CA: Jossey-Bass, 1980. Discusses how to recruit adult learners; to design and implement programs to meet their educational needs; and how to train community college faculty to effectively serve this clientele. $6.95.

Knox, Alan B. *Adult Development and Learning: A Handbook on Individual Growth and Competence in the Adult Years for Education and the Helping Professions.* San Francisco, CA: Jossey-Bass, Inc., 1977. Provides an overview of adult development and learning, including information about the circumstances under which adults learn most effectively, and how development and learning are affected by family roles, social activities, education, occupation, personality and health, 700p. $25.00.

Maxwell, Martha. *Improving Student Learning Skills.* San Francisco, CA: Jossey-Bass, 1979. A comprehensive guide to successful practices and programs for increasing the performance of underprepared students. $17.50.

Muskat, Hermine S. "Women Reentering College: Some Basic Ingredients for Curriculum Development." *Personnel and Guidance Journal*, November 1978, p. 153-156. Available from: American Personnel and Guidance Association, Two Skyline Place, Suite 400, 5203 Leesburg Pike, Falls Church, VA 22041.

Noel, Lee, ed. *Reducing the Dropout Rate.* San Francisco, CA: Jossey-Bass, 1978. Offers examples of successful retention programs and proposed models, and discusses ways to solve the special attrition problems of adults and other non-traditional students. $6.95.

"Nontraditional Programs, Including Programs for Special Categories of Students (Including Equal Opportunity Programs)." *College and University*, Vol. 52, No. 4, Summer 1977, p. 659-79. Proceedings of the American Association of Collegiate Registrars and Admissions Officers' 63rd annual meeting dealing with college courses in high schools, special programs for underprepared college students, women's colleges and the role of the admissions officer in identifying and selecting high-risk students. ERIC #EJ 166-320.

Osborne, Ruth. *Continuing Education For Women's Programs: Administrator's Handbook.* 1978, 116p. Available from EDC/WEEAP Distribution Center, 55 Chapel St., Newton, MA 02160. Developed under a Women's Educational Equity Act grant, the product presents guidelines for implementing and maintaining continuing education programs. $3.00.

O'Toole, J. Corbett and Weeks, Ce Ce. *What Happens After School? A Study of Disabled Women and Education.* Women's Educational Equity Act Program. Includes guidelines for educators and a list of additional guides, organizations and other resources. Order from U.S. Department of Education, Donohoe Building, 400 6th Street, SW, Washington, DC 20202. $3.50.

Peterson, Richard E. *Lifelong Learning in America.* San Francisco, CA: Jossey-Bass, Inc., 1979. Synthesizes and interprets findings from over thirty large scale surveys of the interests, preferences, and characteristics of adult learners and reports what administrators and program leaders can expect from the government in terms of financial support.

Raygor, Robin D. and Wark, D. *Systems for Study.* New York: McGraw-Hill, Inc., 1980. Six basic skills topics — study, reading, vocabulary, spelling, writing, and mathematics are covered in this study skills system which is part of the McGraw-Hill series, *Basic Skills: Tools for Learning Success.* Designed at the University of Minnesota Reading and Study Skills Center and aimed at students who need to improve skills necessary for academic success.

Roueche, John E., ed. *Increasing Basic Skills by Developmental Studies*. San Francisco, CA: Jossey-Bass, Inc., 1977. Includes ways to help college students develop basic academic skills through tutoring, counseling, special courses, and learning centers. $6.95.

Roueche, John E., and Snoth, Jerry J. *Overcoming Learning Problems: A Guide to Developmental Education in College*. San Francisco, CA: Jossey-Bass, Inc., 1977. Provides a comprehensive overview of developmental and remedial education, showing how it can be effectively applied in college; identifying practices that have worked to improve retention and achievement of high-risk and non-traditional students; and details methods of systematically organizing and implementing programs. $11.95.

Shriberg, Arthur, ed. *Providing Student Services For the Adult Learner*. San Francisco, CA: Jossey-Bass, Inc., 1980. Contrasts needs with those of traditional students and suggests ways to modify orientation, registration, academic advising and learning assistance to meet these needs. $6.95.

Verduin, John R. Jr. et al. *Adults Teaching Adults*. Austin, TX: Learning Concepts, 1977. A valuable resource for the practitioner, the administrator and the graduate student in adult education.

Walsh, Patricia Ann, ed. *Serving New Populations*. San Francisco, CA: Jossey-Bass, Inc., 1979. Describes ways of evaluating existing programs, activities, and services to determine how responsive they are to the needs of such special populations as older adults, the handicapped and women. $6.95.

One additional resource for those attempting both to increase the visibility of women in science and to encourage more female students to consider and elect science courses and careers is the Women Scientist Roster. It contains information on 1,300 women who have indicated a willingness to participate in programs to encourage females to consider a career in science. Available prepaid at $3.50 plus $1.00 postage from the National Science Teachers Association, 1742 Connecticut Ave., NW, Washington, DC 20009. Stock #471-14762.

STAFF

Director	Bernice Resnick Sandler
Administrative Associate	Mary De Mouy
Staff Associate	Ursula Barrett Paquette
Staff Associate	Jeanne Fisher-Thompson
Staff Associate	Roberta M. Hall
Administrative Associate	Jean O'Gorman
Staff Assistant	Donna Zubris
Staff Assistant	Karen Seebohm
Staff Assistant	Lisa Shuger
Staff Assistant	Julie Kuhn

October 1980

CUT ALONG DOTTED LINE

CONFIDENCE AND COMPETENCE: BASIC SKILLS PROGRAMS AND REFRESHER COURSES FOR RE-ENTRY WOMEN

FIELD TEST

You can assist us in evaluating this paper by completing the following short questionnaire. If you have additional comments, please use the back of this page or add another sheet. It will help us if you return this questionnaire in the enclosed pre-paid envelope by December 15, 1980 to:

Women's Re-entry Project
Project on the Status and Education of Women
Association of American Colleges
1818 R Street, NW
Washington, DC 20009

8

1. **What is your primary identification?** (Check One)
   - a. ☐ College president or other administrator. Specify title .....
   - b. ☐ College faculty member, lecturer, professor
   - c. ☐ College student
   - d. ☐ Elementary or secondary school teacher or administrator
   - e. ☐ State or local education agency employee
   - f. ☐ Federal employee
   - g. ☐ Other. Please specify .....

2. **In addition, are you:** (Check All That Apply)
   - a. ☐ An affirmative action officer or Title IX coordinator?
   - b. ☐ Directly involved in programs affecting re-entry women?
   - c. ☐ At a women's college?
   - d. ☐ A member of a *campus* committee on women, women's center or women's group?
   - e. ☐ A member of a *noncampus* women's group, women's center, or advocacy group (WEAL, NOW, National Women's Political Caucus, etc.)?
   - f. ☐ A member of a women's professional society or women's caucus or committee of an academic discipline?

3. **If you are currently at a *postsecondary* institution:**
   - a. Is it: ☐ public or ☐ private?
   - b. Is it a: ☐ university ☐ other 4-year college. ☐ 2-year college or ☐ proprietary school?
   - c. Is the total enrollment: ☐ under 1,000 ☐ 1,000 to 5,000 ☐ 5,001 to 10,000 ☐ over 10,000?
   - d. In what state is your institution?.....

4. **Do you think this is a useful paper?**
   - a. YES (Respond to **ALL** reasons that apply)
     1. ☐ to EVALUATE OR CHANGE POLICIES, such as .....
     2. ☐ to START NEW PROGRAMS OR EFFORTS to assist re-entry women, such as .....
     3. ☐ to REDESIGN OR IMPROVE EXISTING PROGRAMS OR SERVICES, such as..
     4. ☐ to IDENTIFY NEW RESOURCES
     5. ☐ to IMPROVE RECRUITMENT of re-entry women to campus by .....
     6. ☐ to TRAIN STAFF to work more effectively with issues regarding re-entry women
     7. ☐ to EDUCATE OR INFORM OTHERS about the issues. Specify whom.....
     8. ☐ to EDUCATE MYSELF ABOUT THE ISSUES
     9. ☐ OTHER. Please specify .....
   - b. ☐ NO, this paper is not useful because .....

5. **What, if any, *important* omissions were there from the paper? (Respond to *ALL* that apply)**
   - a. ☐ NONE, it covered all aspects of the topic well.
   - b. ☐ ISSUES should be described more fully. Please indicate how .....
   - c. ☐ APPROACHES OR ALTERNATIVE REMEDIES were omitted. Please identify .....
   - d. ☐ IMPORTANT MODELS OR INNOVATIVE PROGRAMS were not mentioned. Please identify .....
   - e. ☐ KEY RESOURCES were not mentioned. Please identify .....
   - f. ☐ OTHER. Please describe any other omissions or suggested additions.....

6. **Did you find the paper to be clear, well organized and easy to understand?**
   - a. ☐ Yes.
   - b. ☐ It could be improved by.....

7. **If you found any factual errors or misleading statements in the paper, please identify them (indicating the page number, error or statement and include the correct information if possible). Use the other side of this page.**

8. **Please provide any additional comments or criticisms. Enclose other descriptive material, if desired, and use another sheet of paper if needed.**